AS

Notice of Allowability	Application No.	Applicant(s)	
	09/580,743	GEORGE ET AL.	
	Examiner	Art Unit	
	Daniel S. Metzmaier	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed 2/2/2004 and the interview of 2/19/2004*.

2. ☒ The allowed claim(s) is/are *20-30,34-36,39-42 and 44*.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

 * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *022004* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Karen A. Lowney on February 19, 2004.

The application has been amended as follows:

Replace the claims with those on the following pages.

1-6. (Cancelled).

7. (Cancelled).

8. (Currently amended) The emulsion of claim ~~7~~ 34 in which the pseudoemulsifier is a monovalent salt of stearyl amidobenzoic acid.

9-16. (Cancelled)

17-19. (Cancelled)

20. (Currently amended). The emulsion of claim ~~19~~ 36 in which the hydrophobic moieties are of different chain lengths.

21. (Currently amended). The emulsion of claim ~~19~~ 36 in which at least one of the moieties has a closed ring structure.

22. (Currently amended). The emulsion of claim ~~19~~ 36 in which at least one of the moieties is a long straight-chain moiety.

23. (Currently amended). The emulsion of claim ~~19~~ 36 in which at least one of the moieties has a closed ring structure, and one of the moieties is a long, straight chain moiety.

24. (Original) The emulsion of claim 23 in which the system comprises a hydrophobic closed ring structure, and a long chain hydrophobe, separated from each other by a hydrophilic moiety.

25. (Original) The emulsion of claim 24 in which the hydrophilic moiety is selected from the group consisting of hydroxyl, amide, ester, or carboxyl moieties, hydrocarbons chains substituted with hydroxyl, amide, ester, or carboxyl moieties, and combinations thereof.

26. (Original) The emulsion of claim 23 in which the system comprises a hydrophilic closed ring structure, at least one carboxyl moiety, and a long chain fatty acid moiety.

27. (Currently amended) The emulsion of claim ~~19~~ 36 in which the ~~emulsifier~~ pseudoemulsifier system comprises more than one compound.

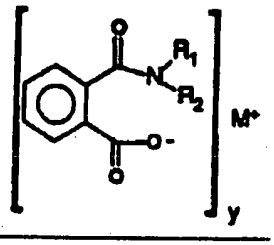
28. (Previously presented) The emulsion of claim 27 in which at least one of the compounds comprises a long, straight-chain hydrocarbon moiety.

29. (Original) The emulsion of claim 28 in which at least one of the compounds comprises a hydrophilic moiety selected from the group consisting of hydroxyl, amide, ester, or carboxyl moieties, hydrocarbons chains substituted with hydroxyl, amide, ester, or carboxyl moieties, and combinations thereof.

30. (Original) The emulsion of claim 29 in which the system further comprises a polymer selected from the group consisting of disaccharides, polysaccharides, and predominantly hydrophilic proteins or peptides.

31-33. (cancelled)

34. (Currently amended) A multiple emulsion ~~comprising the emulsion of claim 7~~ incorporating a water-thin emulsion comprising a non-phospholipid, non-ethoxylated pseudoemulsifier system, the system having a chemical composition with at least one hydrophobic moiety and at least one polar moiety, the size, shape and/or planar arrangement of the hydrophobic and polar moieties being asymmetrical with respect to each other, in which the pseudoemulsifier is a 2-amidocarbonyl-benzoic acid compound having the formula (I)



wherein R_1 and R_2 are independently H or (CH2)nCH3, wherein n=8-22, provided that at least one of R_1 and R_2 is H, wherein M^+ is a cation selected from the group consisting of H, Na, K, NH4, basic amino acids, Ba, Ca, Mg, Al, Ti, and Zr, and y is an integer of a value satisfying the valency of M^+.

35. (Previously presented) A multiple emulsion comprising a water-thin emulsion comprising a non-phospholipid, non-ethoxylated pseudoemulsifier system, the system having a chemical composition with at least one hydrophobic moiety and at least one polar moiety, the size, shape and/or planar arrangement of the hydrophobic and polar moieties being asymmetrical with respect to each other, in which the pseudoemulsifier is surfactin.

36. (Currently amended) A multiple emulsion incorporating ~~the emulsion of claim 19~~ a water-thin oil-in-water emulsion comprising a non-phospholipid, non-ethoxylated pseudoemulsifier system, the system having a chemical composition of one or more compounds with at least two hydrophobic moieties, at least two polar moieties, or at least two of both hydrophobic and polar moieties, the size, shape and/or planar arrangement of the hydrophobic and polar moieties being asymmetrical with respect to each other, each polar moiety being of a different size or shape than the other polar

moiety if present, and each hydrophobic moiety being of different size or shape than the other if present.

37-38. (Cancelled).

39. (Original) The emulsion of claim 35 that comprises no greater than 1% of traditional emulsifier.

40. (Original) The emulsion of claim 36 that comprises no greater than 1% of traditional emulsifier.

41. (Currently amended) The emulsion of claim ~~37~~ 27 that comprises no greater than 1% of traditional emulsifier.

42. (Currently amended) A multiple emulsion prepared by combining a water-in-oil emulsion with the emulsion of claim ~~19~~ 36, and mixing to substantial homogeneity.

43 (cancelled)

44. (previously presented) The emulsion of claim 34 that comprises no greater than 1% of traditional emulsifier.

Reasons for allowance

2. The following is an examiner's statement of reasons for allowance: attention is directed to the reasons set forth in paragraph number 8 of the Office Action mailed October 23, 2002, Paper Number 14. The newly cited reference to Stepan Company, WO 97/25971, examples, particularly example 1 is of particular relevance. Stepan Company lacks a teaching of multiple emulsions incorporating water-thin emulsions as claimed.

Attention is further directed to paragraph bridging pages 3 and 4 of the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703) 308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel S. Metzmaier

Daniel S. Metzmaier
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Art Unit 1712

DSM